

IN THE CLAIMS:

Please cancel Claims 9 and 31-36 without prejudice and amend Claims 1, 20, and 37 as indicated in the restated claims listing that follows:

1. (Currently Amended) A method for assessing the performance of a hearing aid that includes an implanted hearing aid actuator, comprising:

positioning a test device external to a patient having ~~an implanted~~ a hearing aid that includes an implanted hearing aid actuator, wherein the test device is separate from said hearing aid;

utilizing said test device to generate at least one predetermined test signal that is provided by the test device to said hearing aid and to obtain at least one measure of a magnetic field generated by the implanted hearing aid actuator in response to a resultant electrical signal passing through the implanted hearing aid actuator; and,

employing the at least one magnetic field measure to assess the performance of the implanted hearing aid actuator.

2. (Previously Presented) The method of Claim 1 wherein the employing step, includes:

comparing the at least one magnetic field measure to a first predetermined range to assess a first performance parameter, said first performance parameter being one of the operability of the hearing aid and an interface between the actuator and a component of an auditory system of the patient.

3. (Original) The method of Claim 2 comprising:  
providing an output indicative of whether the at least one magnetic field measure is within the first predetermined range.

4. (Previously Presented) The method of Claim 2 wherein the employing step includes:

comparing the at least one magnetic field measure to a second predetermined range to assess a second performance parameter, said second performance parameter being the other one of the operability of the hearing aid and an interface between the actuator and a component of an auditory system of the patient, wherein the second predetermined range is at least partially non-overlapping with the first predetermined range.

5. (Original) The method of Claim 4 comprising:

providing an output indicative of whether the at least one magnetic field measure is within the second predetermined range.

6. (Cancelled)

7. (Previously Presented) The method of Claim 2, wherein the at least one predetermined test signal has a frequency within a predetermined range of a resonant frequency of the actuator.

8. (Previously Presented) The method of Claim 1, wherein the utilizing step includes:

selectively interconnecting the test device to an external transmitter of the hearing aid;  
transmitting the at least one predetermined test signal from the test device to the external transmitter; and

inductively coupling the at least one test signal between the external transmitter and a subcutaneous coil of the hearing aid.

9-15. (Cancelled)

16. (Previously Presented) The method of Claim 1, wherein the positioning step includes:

obtaining a first measurement of the magnetic field at a first location;  
obtaining a second measurement of the magnetic field at a second location;  
providing an output indicative of the first and second measurements of the magnetic field; and

using the output to determine a desired position of the test device.

17. (Previously Presented) The method of Claim 1, wherein the step of utilizing includes:

providing a plurality of predetermined test signals to cause a corresponding plurality of electrical signals to pass through the actuator, wherein the plurality of predetermined test signals are at a corresponding plurality of different frequencies distributed across a predetermined frequency range.

18. (Previously Presented) The method of Claim 17, wherein the utilizing step includes:

using the test device to obtain a plurality of magnetic field measures corresponding to the plurality of electrical signals passing through the actuator.

19. (Previously Presented) The method of Claim 18, wherein the employing step includes:

identifying a resonant frequency of the actuator using the plurality of magnetic field measures.

20. (Currently Amended) A system for assessing the performance of a hearing aid that includes an implanted hearing aid actuator, comprising:

a test device, separate from and positionable external to a patient having ~~an implanted~~ hearing aid with an implanted hearing aid actuator, including:

a signal generator to generate at least one test signal at a predetermined frequency, wherein said hearing aid passes an electrical signal through the implanted hearing aid actuator in response to said test signal; and  
a measurement device to measure a magnetic field generated by the implanted hearing aid actuator in response to the electrical signal to generate at least one test measure of the electrical signal; and

a signal processing unit to process [the reference signal and] the at least one test measure to assess at least one performance parameter of the implanted hearing aid actuator.

21. (Previously Presented) The system of Claim 20, wherein the signal processing unit is configured to compare the at least one test measure to a first predetermined range to assess a first performance parameter, said first performance parameter being one of the operability of the hearing aid and an interface between the actuator and a component of an auditory system of the patient.

22. (Previously Presented) The system of Claim 21, comprising:  
a user interface to provide an output from the signal processing unit indicative of whether the at least one magnetic field measure is within the first predetermined range.

23. (Previously Presented) The system of Claim 22 wherein the signal processing unit is configured to compare the at least one test measure to a second predetermined range to assess a second performance parameter, said second performance parameter being the other one of said first performance parameter being one of the operability of the hearing aid and an interface between the actuator and a component of an auditory system of the patient, wherein the second predetermined range is at least partially non-overlapping with the first predetermined range.

24. (Previously Presented) The system of Claim 23, wherein the user interface is configured to provide a second output from the signal processing unit indicative of whether the at least one test measure is within the second predetermined range.

25. (Previously Presented) The system of Claim 20, wherein the at least one test signal has a frequency within a predetermined range of a resonant frequency of the actuator.

26. (Previously Presented) The system of Claim 20, wherein the signal generator is configured to provide a plurality of predetermined test signals for use in generating a corresponding plurality of electrical signals passing through the actuator, wherein the plurality of predetermined test signals are at a corresponding plurality of different frequencies distributed across a predetermined frequency range.

27. (Previously Presented) The system of Claim 26, wherein the measurement device is configured to measure a plurality of magnetic field measures corresponding to the plurality of electrical signals passing through the actuator.

28-36. (Cancelled)

37. (Currently Amended) The ~~method~~system of Claim 21, wherein said test device includes said signal processing unit.